

```

=> s iron (3a) enriched (3a) yeast
1222353 IRON
12895 IRONS
1223382 IRON
      (IRON OR IRONS)
158725 ENRICHED
      1 ENRICHEDS
158726 ENRICHED
      (ENRICHED OR ENRICHEDS)
249700 YEAST
38906 YEASTS
260103 YEAST
      (YEAST OR YEASTS)
L1      24 IRON (3A) ENRICHED (3A) YEAST

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=> file zcaplus
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                              ENTRY      SESSION
FULL ESTIMATED COST          2.99      3.22

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FILE COVERS 1907 - 18 Jan 2011 VOL 154 ISS 4
 FILE LAST UPDATED: 17 Jan 2011 (20110117/ED)
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2010
 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2010

ZCaplus now includes complete International Patent Classification (IPC) reclassification data for the fourth quarter of 2010.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> d ti 1-24
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

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- TI Preparation of iron-enriched yeast with discarded brewer's yeast
- L1 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Production of nutritional food from yeast extracts
- L1 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Establishment of model of iron deficiency and effects of iron-enriched yeast on growth and blood biochemical indices in weanling piglets
- L1 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Research and application prospect of yeast enriching trace elements
- L1 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Iron-enriched composition comprising iron-containing yeast
- L1 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Statistical optimization of cultivation conditions of iron-enriched yeast
- L1 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Research on screening of iron-enriched yeasts
- L1 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Producing and optimizing fermentation conditions of iron enriched yeast using sugar cane molasses
- L1 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Protective effects of selenium-enriched yeasts on mice with liver damage caused by iron overloading
- L1 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Iron enriched yeast biomass - A promising mineral feed supplement
- L1 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Application of calcium, iron and zinc enriched yeasts to bread
- L1 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Breeding of a high-biomass, iron-enriched yeast strain and its fermentation conditions
- L1 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Recovery of green color of browned plants and algae using mineral-enriched yeasts
- L1 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Construction of a high-biomass, iron-enriched yeast strain and study on distribution of iron in the cells of *Saccharomyces cerevisiae*
- L1 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Screening of high-iron nutrient yeast
- L1 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 TI Yeast cells as sources of essential microelements and vitamins B1 and B2

L1 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Bioavailability of iron-enriched spirulina

L1 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Development and application of dietary minerals. Heme iron and zinc-enriched baker's yeast

L1 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI The distribution of iron in iron-enriched cells of *Saccharomyces cerevisiae*

L1 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Zinc and iron bioavailability using zinc/iron-enriched bakers' yeast

L1 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Composition for pharmaceutical use and/or for nutritional supplementation in humans or animals

L1 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Yeast enriched with trace elements as a new type of trace element source

L1 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Evaluation of bioavailability of iron in iron-enriched yeast. I. Prophylactic assay in rats

L1 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Experimental study on the absorption of iron in iron-enriched nutrient yeast

=> d ibib abs hitind 1-24

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L1 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2011:28086 HCAPLUS <<LOGINID:20110118>>
TITLE: Preparation of iron-enriched yeast with discarded brewer's yeast
AUTHOR(S): Zhang, Jing; Hu, Chunxia; Wang, Zhanyong; Su, Tingting; Zhang, Xuesong
CORPORATE SOURCE: School of Environmental and Biological Engineering, Liaoning University of Petroleum and Chemical Technology, Fushun, 113001, Peop. Rep. China
SOURCE: Shipin Keji (2010), 35(6), 144-147
CODEN: SKHEAB; ISSN: 1005-9989
PUBLISHER: Shipin Keji Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Iron-enriched yeast was prepared with discarded brewers yeast. The cultural conditions were optimized as follows: cultural temperature was 28°C; the recruitment of Fe²⁺ was 120 mg/L in culture medium; 50 mL liquid culture medium was cased in 500 mL triangle, the inoculums of yeast was 50 g, the initial pH value was 4.5-5.0, and the cultural time was 12 h. Under the optimize conditions, iron content of iron-enriched yeast

was resp. 600 µg/g. Organic iron content is 80.3%. The blank and iron-enriched yeast were studied using IR spectra, and the difference of which was compared.

CC 17 (Food and Feed Chemistry)
 ST iron enriched brewers yeast
 IT INDEXING IN PROGRESS
 IT Temperature effects, biological
 (preparation of iron-enriched yeast with discarded brewer's yeast)

L1 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2010:777863 HCAPLUS <<LOGINID:20110118>>
 DOCUMENT NUMBER: 153:36288
 TITLE: Production of nutritional food from yeast extracts
 INVENTOR(S): Yu, Xuefeng; Li, Zhihong; Yu, Minghua; Yao, Juan; Zhang, Yan; Zhu, Yamin; Xia, Changhong
 PATENT ASSIGNEE(S): Angel Yeast Co., Ltd, Peop. Rep. China
 SOURCE: PCT Int. Appl., 28pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2010069191	A1	20100624	WO 2009-CN74142	20090923
W:	AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

CN 101756216 A 20100630 CN 2008-10186666 20081216

PRIORITY APPLN. INFO.: CN 2008-10186666 A 20081216

AB A method of production of nutritional food from yeast exts. is described. The nutritional yeast food contains yeast as its major raw material, and comprises milk powder, maltodextrin, lactose, plant grease powder, calcium carbonate, starch, white granulated sugar, and flavoring agent, essence, further comprises folic acid, vitamin B group, vitamin A, vitamin C, selenium-enriched yeast, zinc-enriched yeast, chromium-enriched yeast, microcryst. cellulose, dehydrated scallion flake, cocoa powder, fruit and vegetable powder, sesame, milk tea powder, soy milk powder, oat flake. The nutritional yeast food in the forms of powder, snowflake and tablet are obtained through various methods.

IPCI A23L0001-29 [I,A]; A23C0009-13 [I,A]
 IPCR A23L0001-29 [I,C]; A23L0001-29 [I,A]; A23C0009-13 [I,C]; A23C0009-13 [I,A]
 CC 17-14 (Food and Feed Chemistry)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2010:61710 HCAPLUS <<LOGINID:20110118>>
 DOCUMENT NUMBER: 153:357686
 TITLE: Establishment of model of iron deficiency and effects of iron-enriched yeast on growth and blood biochemical indices in weanling piglets
 AUTHOR(S): Xu, Zhenying; Chen, Daiwen; Yu, Bing
 CORPORATE SOURCE: Institute of Animal Nutrition, Sichuan Agricultural University, Ya'an, 625014, Peop. Rep. China
 SOURCE: Dongwu Yingyang Xuebao (2009), 21(6), 897-902
 CODEN: DYXOAK; ISSN: 1006-267X
 PUBLISHER: Zhongguo Xumu Shouyi Xuehui
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 AB This study was to explore the establishment of model of iron deficiency in weanling piglet, and to observe the change of growth performance, blood biochem. indexes and the iron content of the organ after supplementation of iron-enriched yeast or ferrous sulfate.
 Thirty-five 21-day-old weanling D*L*Y piglets with an average weight of (5.57±0.83) kg, were randomly allocated into 7 groups with 5 replicates (1 pig per replicate), and each piglet was fed in single cage. Piglets were fed with the basal diet included 22.43 mg/kg iron for 4 wk to consume reserving iron in body. After iron was exhausted, piglets in control group were fed with the basal diet continuously, and piglets in 6 trial groups were fed with the basal diet supplemented with 80, 120 and 180 mg/kg iron either from iron-enriched yeast or ferrous sulfate during trial period. The trial duration was 10 days after 28 days depletion period. The results showed that piglets' model of iron deficiency was successfully established after 28 days. When iron concentration was 120 mg/kg, ADG and ADFI of piglets were the highest in all groups. There were significant effects on interactions of iron sources and levels on ADG and F/G (P<0.05). There were no significant effects on interactions of iron sources and levels on blood routine and blood biochem. indexes (P>0.05). Both iron-enriched yeast and ferrous sulfate of 120 mg/kg iron concentration significantly increased iron content in the internal organs, including spleen, liver, kidney and heart compared with control group (P<0.01); while iron concentration in ferrous sulfate with 120 mg/kg iron group significantly higher than that in iron-enriched yeast group (P<0.01). ADG, ADFI, serum ferritin and transferrin in iron-enriched yeast group were higher than those in ferrous sulfate group. In conclusion, both iron-enriched yeast and ferrous sulfate could improve the state of iron deficiency, and effect of iron-enriched yeast was better than that of ferrous sulfate.
 CC 18-1 (Animal Nutrition)
 Section cross-reference(s): 13
 IT Blood serum
 Feeding experiment
 Growth, animal
 Nutrition, animal
 Sus scrofa domestica
 Swine
 (establishment of model of iron deficiency and effects of iron-enriched yeast on growth and blood biochem. indexes in weanling piglets)
 IT Ferritins
 Transferrins
 RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical

study); BIOL (Biological study)
 (establishment of model of iron deficiency and effects of iron
 -enriched yeast on growth and blood biochem.
 indexes in weanling piglets)

IT Yeast
 (iron-enriched; establishment of model of iron
 deficiency and effects of iron-enriched
 yeast on growth and blood biochem. indexes in weanling piglets)

IT 7439-89-6, Iron, biological studies 7720-78-7, Ferrous sulfate
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL
 (Biological study); USES (Uses)
 (establishment of model of iron deficiency and effects of iron
 -enriched yeast on growth and blood biochem.
 indexes in weanling piglets)

L1 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2009:1479211 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 153:60595
 TITLE: Research and application prospect of yeast enriching
 trace elements
 AUTHOR(S): Guo, Xuenan; Cui, Li; Wang, Zhaoyue; He, Xiuping;
 Zhang, Borun
 CORPORATE SOURCE: Institute of Microbiology, Chinese Academy of
 Sciences, Beijing, 100101, Peop. Rep. China
 SOURCE: Shipin Yu Fajiao Gongye (2009), 35(4), 124-127
 CODEN: SPYYDO; ISSN: 0253-990X
 PUBLISHER: Shipin Yu Fajiao Gongye
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: Chinese

AB A review. Trace elements are necessary nutrients of organism. They are
 important to maintain the normal metabolism of organism. Yeast can transform
 inorg. trace elements into organic form. In addition the biol. utilization
 rates of trace elements are improved. Yeast contains abundant nutrient
 components, and it can be applied as feed additive to animal industry. In
 this paper, the biol. function, research and application prospect of
 several kinds of yeast enriching trace elements were reviewed, for
 example, selenium-enriched yeast, iron-
 enriched yeast, zinc-enriched yeast
 and chromium-enriched yeast.

CC 17-0 (Food and Feed Chemistry)

L1 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2009:828782 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 151:132266
 TITLE: Iron-enriched composition comprising
 iron-containing yeast
 INVENTOR(S): Yamaguchi, Fumihide; Takeda, Yasuhiko
 PATENT ASSIGNEE(S): Japan Tobacco Inc., Japan
 SOURCE: PCT Int. Appl., 34pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009084122	A1	20090709	WO 2007-JP75431	20071228
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,				

CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

WO 2007-JP75431

20071228

AB It is intended to provide a composition for increasing the iron concentration in the

blood including yeast containing iron in an amount of 0.3 g or more per 100 g of

dry yeast. The composition of the invention shows better iron absorption compared with hem iron or water-insol. inorg. iron which is equivalent in terms of amount of iron, and causes less stimulation to the stomach compared with iron sulfate (II) which is equivalent in terms of amount of iron. Therefore, it is suitable for the case of repeated administration, the case of administration on an empty stomach, or before during or after meals, and the case of administration to a subject for whom less stimulation to the stomach is desired. For example, iron-containing yeast (iron content 5.91 g/100 g) was prepared by culturing *Saccharomyces cerevisiae* FT-4 (BP-8081) in a culture medium containing iron sulfate.

IPCI A61K0033-26 [I,A]; A23L0001-30 [I,A]; A61K0036-06 [I,A]; A61P0003-00 [I,A]; C12N0001-16 [I,A]

IPCR A61K0033-26 [I,C]; A61K0033-26 [I,A]; A23L0001-30 [I,C]; A23L0001-30 [I,A]; A61K0036-06 [I,C]; A61K0036-06 [I,A]; A61P0003-00 [I,C]; A61P0003-00 [I,A]; C12N0001-16 [I,C]; C12N0001-16 [I,A]

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 18

REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:746306 HCAPLUS <<LOGINID::20110118>>

DOCUMENT NUMBER: 151:311687

TITLE: Statistical optimization of cultivation conditions of iron-enriched yeast

AUTHOR(S): Xie, Zhenjian; Jiao, Shirong; Liu, Xiaodong

CORPORATE SOURCE: School of Bioengineering, Xihua University, Chengdu, Sichuan Province, 610039, Peop. Rep. China

SOURCE: Shipin Yu Fajiao Gongye (2008), 34(7), 98-102

CODEN: SPYYDO; ISSN: 0253-990X

PUBLISHER: Shipin Yu Fajiao Gongye

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB The *Saccharomyces cerevisiae* 9F was selected as the test strain, and then statistical experiment design was applied to optimize the fermentation process

of iron-enriched yeast. Following the one-variable-at-a-time design, Plackett-Burman design was applied to study the content of total iron and key factors, such as temperature, shaking table revolution and the concentration of Fe²⁺ added to the culture medium. Then Box-Behnken design was then applied in order to use the response surface function. The optimum fermentation conditions to obtain a total iron content

of

594.923 mg/L were culture temperature 30.16°C, shaking table revolution 198.50 r/min and the concentration of Fe²⁺ 1440.69 mg/L.

CC 16-7 (Fermentation and Bioindustrial Chemistry)

ST optimization iron enriched yeast fermm

IT Agitation (mechanical)

Biomass

Fermentation

Growth, microbial

Saccharomyces cerevisiae

Temperature effects, biological

(statistical optimization of cultivation conditions of iron-enriched yeast)

IT Optimization

(statistical; statistical optimization of cultivation conditions of iron-enriched yeast)

IT 15438-31-0, Iron 2+, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(statistical optimization of cultivation conditions of iron-enriched yeast)

L1 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2008:1408788 HCAPLUS <<LOGINID::20110118>>

DOCUMENT NUMBER: 150:562108

TITLE: Research on screening of iron-enriched yeasts

AUTHOR(S): Jiao, Shirong; Zuo, Cheng; Zeng, Jun; Wang, Ling

CORPORATE SOURCE: College of Public Health, Sichuan University, Chengdu, Sichuan Province, 610041, Peop. Rep. China

SOURCE: Zhongguo Niangzao (2007), (11), 53-56

CODEN: ZHNIDA; ISSN: 0254-5071

PUBLISHER: Beijing Zhongniang Zazhishe

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB The iron-enriched yeast strain 9F was obtained by primary screening, second screening and domesticating of 10 different *Saccharomyces cerevisiae*. The fermentation conditions of strain 9F were optimized as follows: 10° Bx wort, 8 g/L urea, 0.02 g/L KH₂PO₄, 1200 g/mL Fe²⁺, initial pH was natural, liquid medium volume was 50 mL/250 mL, fermentation temperature was 32° and fermentation time was 24 h.

Under above conditions, the biomass, iron content and concentration rate of 9F reached 11.08 g/L, 32.56 mg/g yeast and 30.10%, resp. The growth pattern of 9F was investigated to reveal a kinetic relationship.

CC 16-7 (Fermentation and Bioindustrial Chemistry)

ST iron enriched yeast growth

IT Biomass

Growth, microbial

Temperature effects, biological

Yeast

pH

(research on screening of iron-enriched yeasts)

IT 57-13-6, Urea, biological studies 7439-89-6, Iron, biological studies 7778-77-0, Potassium dihydrogen phosphate 15438-31-0, Iron 2+, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(research on screening of iron-enriched yeasts)

- L1 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2008:960041 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 150:281447
 TITLE: Producing and optimizing fermentation conditions of iron enriched yeast using sugar cane molasses
 AUTHOR(S): He, Haiyan; Qin, Yongling; Li, Nan; Chen, Guiguang; Liang, Zhiquan
 CORPORATE SOURCE: Department of Chemistry and Life Science, Hechi University, Yizhou, Guangxi Province, 546300, Peop. Rep. China
 SOURCE: Shipin Gongye Keji (2007), 28(8), 105-108
 CODEN: SGOKE6; ISSN: 1002-0306
 PUBLISHER: Shipin Gongye Keji Bianjibub
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
- AB The iron-enriched yeast was produced by using sugar-cane molasses, after single factor and orthogonal design expts. The optimal combinations were as follow: the initial pH of culture medium was 5.0, the inoculating content was 8% and then cultured on the shake bed with 180 r/min at 28 degree for about 72 h. Under the optimized conditions ,the biomass was 13.46 g/L, iron content of the yeast cell was 7.97 mg/g, and the total iron content was 107.28 mg/L.
- CC 16-7 (Fermentation and Bioindustrial Chemistry)
 Section cross-reference(s): 10
- IT Fermentation
 Molasses
 Temperature effects, biological
 Yeast
 pH
 (producing and optimizing fermentation conditions of iron enriched yeast using sugar cane molasses)
- IT Optimization
 (statistical; producing and optimizing fermentation conditions of iron enriched yeast using sugar cane molasses)
- IT 7439-89-6, Iron, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (producing and optimizing fermentation conditions of iron enriched yeast using sugar cane molasses)
- L1 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2007:1233850 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 148:354730
 TITLE: Protective effects of selenium-enriched yeasts on mice with liver damage caused by iron overloading
 AUTHOR(S): Zhu, Hang; He, Qiu-shi; Lu, Yang; Lei, Lei; Luo, Hai-ji
 CORPORATE SOURCE: Department of Nutrition and Food Hygiene, Public Hygiene and Tropical Medicine School, Southern Medical University, Guangzhou, 510515, Peop. Rep. China
 SOURCE: Redai Yixue Zazhi (2007), 7(8), 732-734
 CODEN: RYZEAI; ISSN: 1672-3619
 PUBLISHER: Guangdong Redai Yixue Zazhishe
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
- AB The objective is to examine the effects of selenium-enriched yeasts on lipid peroxidn. and liver cell apoptosis caused by iron overloading.

Liver damage was induced in mice by i.p. injection with dextran for 6 wk. The mice were then fed with various dosages of selenium-enriched yeasts. The levels of malondialdehyde (MDA), the activities of superoxide dismutase (SOD), catalase (CAT) and glutathione peroxidase (GSH-Px), and the extent of cell apoptosis were then determined. Selenium-enriched yeasts 40 mg/(kg·d) was found to decrease the content of liver MDA, upregulate the activities of SOD, CAT and GSH-Px, and decrease apoptosis of the liver cells. High concns. of selenium-enriched yeasts 20 and 60 mg/(kg·d) were found to increase the content of MDA and decrease the activities of SOD, CAT and GSH-Px, and increase apoptosis of hepatocytes. Selenium-enriched yeasts may function as antioxidant and oxidant, depending on the concentration of the selenium-enriched yeasts.

CC 18-1 (Animal Nutrition)

ST iron liver damage selenium enriched yeast supplement

L1 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:121292 HCAPLUS <<LOGINID::20110118>>

DOCUMENT NUMBER: 146:315513

TITLE: Iron enriched yeast

AUTHOR(S): biomass - A promising mineral feed supplement
Pas, Maja; Piskur, Barbara; Sustaric, Matevz; Raspor, Peter

CORPORATE SOURCE: Food Science and Technology Department, Biotechnical Faculty, Chair of Biotechnology, University of Ljubljana, Ljubljana, 1111, Slovenia

SOURCE: Bioresource Technology (2007), 98(8), 1622-1628
CODEN: BIRTEB; ISSN: 0960-8524

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Yeast biomass enriched with iron could represent a new and safer solution for prevention from anemia development. Such an iron source is less toxic and has better absorbability in organisms. The purpose of our research was the determination of the most suitable

iron source in the cultivation medium for the yeast *Saccharomyces cerevisiae*, regarding good growth and iron accumulation in cells. Iron(III) citrate, iron(III) chloride, iron(III) nitrate and Fe-EDTA complex were used. The uptake of the chosen iron compound, Fe(III) citrate, by the yeasts *Candida intermedia* and *Kluyveromyces marxianus* was also investigated. Different growth behavior of the three yeast strains in the presence of Fe(III) citrate was observed. The highest amts. of accumulated iron in *S. cerevisiae*, *C. intermedia* and *K. marxianus* biomass were about 13, 20 and 34 mg Fe g⁻¹ dry weight, resp. To optimize the accumulation of iron in *K. marxianus* and to characterize iron enriched yeast biomass, further expts. are needed.

CC 17-12 (Food and Feed Chemistry)

IT Biomass

Candida intermedia

Feed

Feed additives

Kluyveromyces marxianus

Saccharomyces cerevisiae

Yeast

(iron enriched yeast biomass - promising

mineral feed supplement)

IT 3522-50-7, Iron(III) citrate 7439-89-6, Iron, biological studies 7705-08-0, Iron(III) chloride, biological studies

10421-48-4, Iron(III) nitrate 15275-07-7, Iron(III)-EDTA complex

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(iron enriched yeast biomass - promising mineral feed supplement)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:1269802 HCAPLUS <<LOGINID::20110118>>

DOCUMENT NUMBER: 144:330162

TITLE: Application of calcium, iron and zinc
enriched yeasts to bread

AUTHOR(S): Shi, Changbo; Yan, Xishuang

CORPORATE SOURCE: Harbin University of Commerce, Harbin, 150076, Peop.
Rep. China

SOURCE: Shipin Gongye Keji (2005), 26(2), 78-79

CODEN: SGOKE6; ISSN: 1002-0306

PUBLISHER: Shipin Gongye Keji Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Contents of calcium, iron and zinc in Brewers' yeast (organic forms) were increased by adding certain amts. of calcium chloride, ferrous sulfate and zinc sulfate (inorg. forms) into yeast culture media. There was no significant difference in apparent digestibility between bread prepared by calcium enriched yeast and normal yeast (control), while the apparent digestibilities of bread prepared by iron and zinc enriched yeasts were markedly higher than that of the control group. The optimal amts. of calcium, iron and zinc enriched yeasts added into bread were 2.5%, 3% and 3%, resp., and the corresponding contents of mineral elements in bread were increased greatly.

CC 17-11 (Food and Feed Chemistry)

IT Bread

Digestibility

Fermentation

(application of calcium, iron and zinc enriched yeast for bread)

IT Brewers' yeast

(mineral elements enriched; application of calcium, iron and zinc enriched yeast for bread)

IT Yeast

(mineral elements-containing; application of calcium, iron and zinc enriched yeast for bread)

IT 7439-89-6, Iron, biological studies 7440-66-6, Zinc, biological studies

7440-70-2, Calcium, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(application of calcium, iron and zinc enriched yeast for bread)

IT 7720-78-7, Ferrous sulfate 7733-02-0, Zinc sulfate 10043-52-4, Calcium chloride, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(application of calcium, iron and zinc enriched yeast for bread)

L1 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:285961 HCAPLUS <<LOGINID::20110118>>

DOCUMENT NUMBER: 144:50099
 TITLE: Breeding of a high-biomass, iron-enriched yeast strain and its fermentation conditions
 AUTHOR(S): Yuan, Yulan; Guo, Xuena; Zhang, Borun; Liu, Shigui
 CORPORATE SOURCE: College of Life Sciences, Sichuan University, Chengdu, 610064, Peop. Rep. China
 SOURCE: Gongye Weishengwu (2004), 34(4), 29-33
 CODEN: GOWEEK; ISSN: 1001-6678
 PUBLISHER: Quanguo Gongye Weishengwu Xinxì Zhongxin
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

AB A high-biomass, iron-enriched yeast fusant strain ZYF-15 was obtained by primary screening from 402 different genera and species, second screening, isolation of haploid, DES mutagenesis and interspecies protoplasts fusion. Under the optimized fermentation conditions, the biomass and iron content of strain ZYF-15 reached 11.2g/L and 24.5 mg/g dry cells resp. The total iron content of the fusion strain was 2.6 and 1.9 times than that of parent strains ZY-46 (*Saccharomyces cerevisiae*) and ZY-173 (*Saccharomyces kluyveri*), resp.
 CC 16-2 (Fermentation and Bioindustrial Chemistry)
 Section cross-reference(s): 10
 ST high biomass iron enriched yeast strain
 fermm
 IT Fusion, biological
 (protoplast; selection of a high-biomass, iron-enriched yeast strain and its fermentation conditions)
 IT Fermentation
 Genetic selection
 Mutagenesis
Saccharomyces cerevisiae
Saccharomyces kluyveri
 (selection of a high-biomass, iron-enriched yeast strain and its fermentation conditions)
 IT 7439-89-6, Iron, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (selection of a high-biomass, iron-enriched yeast strain and its fermentation conditions)

L1 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2004:588000 HCAPLUS <<LOGINID:20110118>>
 DOCUMENT NUMBER: 141:122727
 TITLE: Recovery of green color of browned plants and algae using mineral-enriched yeasts
 INVENTOR(S): Tsuchida, Yoshiaki; Toyoguchi, Minoru
 PATENT ASSIGNEE(S): Nabebayashi K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004201553	A	20040722	JP 2002-373703	20021225
PRIORITY APPLN. INFO.:			JP 2002-373703	20021225
AB	Green plants, e.g. leaves for wrapping bean-jam cakes, edible wild plants, etc., and marine green algae, which are browned due to storage upon drying			

or salting, are heated with mineral-enriched yeasts to recover the green color. Thus, salted nozawana (*Brassica campestris rapifera*) was desalted with running water, soaked in H₂O containing mineral-enriched yeast, and heated at $\geq 50^{\circ}$ for 30 min to become green.

IPCI A23L0001-272 [ICM,7]; A23L0001-27 [ICM,7,C*]; A23L0001-337 [ICS,7]
 IPCR A23L0001-27 [I,C*]; A23L0001-272 [I,A]; A23L0001-337 [I,A]; A23L0001-337 [I,C*]

CC 17-10 (Food and Feed Chemistry)

IT 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (yeasts enriched with; recovery of green color of
 plants and algae browned due to dry storage or salting, by heating with
 mineral-enriched yeasts)

L1 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:110131 HCAPLUS <<LOGINID::20110118>>

DOCUMENT NUMBER: 140:405515

TITLE: Construction of a high-biomass, iron-enriched yeast strain and study on distribution of iron in the cells of *Saccharomyces cerevisiae*

AUTHOR(S): Yuan, Yulan; Guo, Xue; He, Xiuping; Zhang, Borun; Liu, Shigui

CORPORATE SOURCE: College of Life Science, Sichuan University, Chengdu, 610064, Peop. Rep. China

SOURCE: Biotechnology Letters (2004), 26(4), 311-315

CODEN: BILED3; ISSN: 0141-5492

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A high-biomass, iron-enriched *Saccharomyces cerevisiae* ZYF-15 was constructed by interspecies protoplast fusion. Under optimal fermentation condition, the biomass and iron content of the strain reached 11 g l⁻¹ and 25 mg Fe g⁻¹ dry cells, resp. About 96% of enriched iron is converted into organic iron, which is mainly in cell walls and vacuoles with some bound to DNA, RNA and protein.

CC 16-2 (Fermentation and Bioindustrial Chemistry)

Section cross-reference(s): 10, 17

IT Fermentation

Saccharomyces cerevisiae

(construction of high-biomass, iron-enriched
 yeast strain and study on distribution of iron in cells of
Saccharomyces cerevisiae)

IT DNA

Proteins

RNA

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(construction of high-biomass, iron-enriched
 yeast strain and study on distribution of iron in cells of
Saccharomyces cerevisiae)

IT Fusion, biological

(protoplast; construction of high-biomass, iron-enriched yeast strain and study on distribution of iron in cells of *Saccharomyces cerevisiae*)

IT 7720-78-7, Ferrous sulfate

RL: BCP (Biochemical process); BIOL (Biological study); PROC (Process)
 (construction of high-biomass, iron-enriched

yeast strain and study on distribution of iron in cells of
Saccharomyces cerevisiae)

IT 7439-89-6, Iron, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (construction of high-biomass, iron-enriched
 yeast strain and study on distribution of iron in cells of
Saccharomyces cerevisiae)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2004:64587 HCAPLUS <<LOGINID:20110118>>
 DOCUMENT NUMBER: 140:356262
 TITLE: Screening of high-iron nutrient yeast
 AUTHOR(S): Xue, Dong-hua; Lu, Jun; Jin, Hua
 CORPORATE SOURCE: School of Biological Engineering, Changchun University
 of Technology, Changchun, 130012, Peop. Rep. China
 SOURCE: Jilin Huagong Xueyuan Xuebao (2003), 20(4), 10-12
 CODEN: JHXUFO; ISSN: 1007-2853
 PUBLISHER: Jilin Huagong Xueyuan Xuebao Bianjibu
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

AB Yeast with concentrated iron and fine biomass has been selected as the test
 strain. It uses molasses as the raw material. Suitable amts. of inorg.
 iron and nutrient salt are added. After fermentation and culturing, the iron
 content of the yeast cell is 2,352 mg/kg, protein over 53.38%. The yield
 of the iron yeast is over 2.7%.

CC 17-14 (Food and Feed Chemistry)

ST iron enriched yeast molasse fermn

L1 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2003:48668 HCAPLUS <<LOGINID:20110118>>
 DOCUMENT NUMBER: 138:150039
 TITLE: Yeast cells as sources of essential microelements and
 vitamins B1 and B2
 AUTHOR(S): Varga, E.; Maraz, A.
 CORPORATE SOURCE: Faculty of Pharmacy, University of Medicine and
 Pharmacy, Tg. Mures, 4300, Rom.
 SOURCE: Acta Alimentaria (2002), 31(4), 393-405
 CODEN: ACALDI; ISSN: 0139-3006
 PUBLISHER: Akademiai Kiado
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Baker's yeast (*Saccharomyces cerevisiae* Sz1) enriched
 in chromium, iron, selenium or zinc was prepared by shaken
 cultivation and laboratory fermentation Determination of the cellular
 distribution of
 microelements indicated that a considerable portion (68-88%) was bound to
 the cell constituents; only a very little part was in the cytosol and
 vacuole. Enrichment of yeast cells with iron was accompanied by a
 considerable increase in vitamin B2 content. Ascorbic acid as an
 antioxidant decomposed very rapidly during storage, while tocopherol was
 quite stable. Selenium enrichment did not affect the inactivation of
 ascorbic acid, but it accelerated the decomposition of tocopherol.

CC 10-1 (Microbial, Algal, and Fungal Biochemistry)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2002:635839 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 138:204114
 TITLE: Bioavailability of iron-enriched spirulina
 AUTHOR(S): Yoshinari, Orie
 CORPORATE SOURCE: Development Dept., Ryusendo Co., Ltd., Japan
 SOURCE: Food Style 21 (2002), 6(8), 83-86
 CODEN: FSTYFF; ISSN: 1343-9502
 PUBLISHER: Shokuhin Kagaku Shinbunsha
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: Japanese

AB A review on iron-enriched spirulina having higher iron bioavailability than wheat, yeast, and beef, for use for iron supplementation in treatment of iron-deficient anemia, etc.
 CC 18-0 (Animal Nutrition)
 Section cross-reference(s): 17

L1 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2002:635835 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 138:204113
 TITLE: Development and application of dietary minerals. Heme iron and zinc-enriched baker's yeast
 AUTHOR(S): Fukami, Katsuya
 CORPORATE SOURCE: Japan Tobacco Inc., Japan
 SOURCE: Food Style 21 (2002), 6(8), 69-72
 CODEN: FSTYFF; ISSN: 1343-9502
 PUBLISHER: Shokuhin Kagaku Shinbunsha
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: Japanese

AB A review covering characteristics of heme iron obtained by ultrafiltration from animal blood, and zinc-enriched yeast as food materials for supplementation of minerals.
 CC 18-0 (Animal Nutrition)
 Section cross-reference(s): 17
 ST review heme iron zinc enriched yeast food material
 IT Food additives
 Yeast
 (characteristics of heme iron and zinc-enriched yeast as food material)
 IT Mineral elements, biological studies
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (characteristics of heme iron and zinc-enriched yeast as food material)
 IT 7439-89-6, Iron, biological studies 7440-66-6, Zinc, biological studies 14875-96-8, Heme
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (characteristics of heme iron and zinc-enriched yeast as food material)

L1 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2002:147276 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 136:213324

TITLE: The distribution of iron in iron-enriched cells of *Saccharomyces cerevisiae*
 AUTHOR(S): Gaudreau, H.; Tompkins, T. A.; Champagne, C. P.
 CORPORATE SOURCE: Food Research and Development Center, Agriculture and Agri-Food Canada, Saint-Hyacinthe, QC, J2S 8E3, Can.
 SOURCE: Acta Alimentaria (2001), 30(4), 355-361
 CODEN: ACALDI; ISSN: 0139-3006
 PUBLISHER: Akademiai Kiado
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Fresh or freeze-dried iron-enriched bakers' yeast (5% of total solids composed of iron) were fractionated, and the distribution of iron was examined. After centrifugation of fresh yeast creams, 89% of total iron was found in the supernatant, which contained only 23% of the total solids. Results suggest that only 13% of the iron is bound to cells in the fresh yeast suspension. Most of the cell-located iron was found on the cell wall, whereas the cytoplasm contained proportionally (iron content of total solids) almost 3 times less iron than the cell walls. Freeze-drying of the iron-enriched yeast had marked effects on the distribution of total solids and iron (in the fractionation procedures that were carried out following their rehydration). The freeze-drying process induced binding of free iron to the yeast cell wall, and twice as much iron was thus found on freeze-dried cells. In the freeze-dried product, it was estimated that 27% of iron was bound to cell fractions.

CC 10-1 (Microbial, Algal, and Fungal Biochemistry)
 OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
 REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2000:136833 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 133:30080
 TITLE: Zinc and iron bioavailability using zinc/iron -enriched bakers' yeast
 AUTHOR(S): Tsujimura, Masaru; Higasa, Shizu; Shimada, Shoji
 CORPORATE SOURCE: Laboratory of Bio-Organic Chemistry, Kagawa Nutrition University, Japan
 SOURCE: Joshi Eiyo Daigaku Kiyo (1999), 30, 159-165
 CODEN: JEDKD7; ISSN: 0286-0511
 PUBLISHER: Kagawa Eiyo Gakuen
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese

AB Zinc and iron bioavailability using zinc and iron fortified bakers' yeast was studied in the Fischer male rats by observing their general growth, mineral levels in serum, liver, brain, and kidney (zinc-enriched bakers' yeast food only). Feed composition of test groups were as follows. (1) Control food group (C group): fed unmodified AIN-93G feed. (2) The zinc yeast test food group (zinc group) and (3) the iron yeast test food group (iron group): fed feed in which all zinc or iron contained in C group food was replaced with a yeast derivative (4) One-half zinc yeast food group (1/2 zinc group) and (5) one-half iron yeast food group (1/2 iron group): fed feed in which one-half of the zinc or iron of C group food was replaced with a yeast derivative and the remaining one-half by a standard mineral mixture

Granulated yeast was added to maintain yeast count at the same level in the feed for zinc and iron groups. (6) The mineral-zinc food group (m-zinc group) and (7) the mineral-iron food group (m-iron group): fed C group

food supplemented with the granulated yeast to maintain yeast count at the same level as in the zinc and iron groups. Dried yeast (*Saccharomyces cerevisiae*) specially produced by Oriental Yeast Co., Ltd. and high zinc content yeast (2,300 mg/100 g) or high iron content yeast (1,520 mg/100 g) were used as sources of minerals for feed preparation. Zinc and iron content (in mg/100 mg) in each feed was as follows: for C group (zinc: 3.88, iron: 4.15), zinc group (zinc: 3.69, iron: 4.07), Iron group (zinc: 4.21, iron: 4.09), 1/2 zinc group (zinc: 3.80, iron: 4.14), 1/2 iron group (zinc: 4.01, iron: 3.95), m-zinc group (zinc: 4.01, iron: 4.08), m-iron group (zinc: 4.04, iron: 3.94). Growth observation data and test results are summarized as below. (1) No significant differences in body-weight gain, feed intake, and weight gain per feed consumed in grams were noted for zinc-/iron-enriched feed groups using bakers' yeast as the mineral source and the plain mineral feed mix. (2) No significant differences in serum zinc or iron levels were observed in the tested groups. (3) Significant differences in liver and brain zinc/iron were observed in some test groups, but none were due to the intake of mineral-enriched bakers' yeast. (4) In the zinc-enriched bakers yeast test, zinc and iron were present at significantly high levels in the kidneys of groups fed mineral-enriched bakers' yeast.

- CC 18-1 (Animal Nutrition)
 Section cross-reference(s): 17
- ST zinc iron enriched yeast bioavailability
- IT Bakers' yeast
 Brain
 Kidney
 Liver
Saccharomyces cerevisiae
 (zinc and iron bioavailability using zinc/iron-enriched bakers' yeast)
- IT Mineral elements, biological studies
 RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
 (zinc and iron bioavailability using zinc/iron-enriched bakers' yeast in relation to)
- IT 7439-89-6, Iron, biological studies 7440-66-6, Zinc, biological studies
 RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
 (zinc and iron bioavailability using zinc/iron-enriched bakers' yeast)
- IT 7439-95-4, Magnesium, biological studies 7440-09-7, Potassium, biological studies 7440-23-5, Sodium, biological studies 7440-50-8, Copper, biological studies 7440-70-2, Calcium, biological studies 7723-14-0, Phosphorus, biological studies
 RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
 (zinc and iron bioavailability using zinc/iron-enriched bakers' yeast in relation to)

L1 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 1999:579658 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 131:204635
 TITLE: Composition for pharmaceutical use and/or for nutritional supplementation in humans or animals
 INVENTOR(S): Drewski, Andrea; Mauren, Leo; Siegmund, Martin; Wendt, Sylke

PATENT ASSIGNEE(S): Dr. Schieffer Arzneimittel G.m.b.H., Germany
 SOURCE: Ger., 12 pp.
 CODEN: GWXXAW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19812753	C1	19990909	DE 1998-19812753	19980323
WO 9948506	A2	19990930	WO 1999-DE732	19990316
W: AU, BR, CA, CN, ID, JP, KR, MX, PL, SG, TR, US, VN, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9936995	A	19991018	AU 1999-36995	19990316
PRIORITY APPLN. INFO.:			DE 1998-19812753	A 19980323
			WO 1999-DE732	W 19990316

AB An oral composition containing a pharmaceutical or food supplement (e.g. a vitamin or provitamin) as active agent, embedded in a matrix for sustained release of the active agent at a reproducible rate, includes a metal-enriched yeast (particle size <60 mesh) to regulate the release rate of the active agent. The metal-enriched yeast can also correct deficiencies in the corresponding trace metal, as well as deficiencies in B vitamins in which the yeast is also rich. Thus, tablets were prepared containing ascorbic acid 236.25, 5% Zn yeast 300, lactose 42.14, hydroxypropylmethylcellulose (matrix) 146.9, PVP 23, stearic acid 15.6, talc 8.66, fumed silica 4.33, and Mg stearate 3.12 mg.

IPCI A61K0035-72 [ICM,6]; A61K0009-22 [ICS,6]; A61K0009-52 [ICS,6]; A23L0001-29 [ICS,6]; A23K0001-16 [ICS,6]

IPCR A23K0001-00 [I,C*]; A23K0001-00 [I,A]; A23K0001-16 [I,C*]; A23K0001-16 [I,A]; A23K0001-175 [I,C*]; A23K0001-175 [I,A]; A23L0001-28 [I,C*]; A23L0001-28 [I,A]; A23L0001-30 [I,C*]; A23L0001-30 [I,A]; A23L0001-304 [I,C*]; A23L0001-304 [I,A]; A61K0009-22 [I,C*]; A61K0009-22 [I,A]; A61K0009-52 [I,C*]; A61K0009-52 [I,A]; A61K0035-00 [I,C*]; A61K0035-00 [I,A]

CC 63-6 (Pharmaceuticals)

IT Section cross-reference(s): 17
 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7439-98-7, Molybdenum, biological studies 7440-47-3, Chromium, biological studies 7440-50-8, Copper, biological studies 7440-62-2, Vanadium, biological studies 7440-66-6, Zinc, biological studies 7440-70-2, Calcium, biological studies 7782-49-2, Selenium, biological studies
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (yeast enriched with; metal-yeast-containing composition for pharmaceutical use or for nutritional supplementation in humans or animals)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 1998:113535 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 128:204209

ORIGINAL REFERENCE NO.: 128:40387a,40390a
 TITLE: Yeast enriched with trace elements as a new type of trace element source
 AUTHOR(S): Hegoczki, Jozsef; Suhajda, Agnes; Janzso, Bela; Vereczky, Gabor
 CORPORATE SOURCE: Hung.
 SOURCE: Elelmezesi Ipar (1997), 51(11), 339-341
 CODEN: EMIPAB; ISSN: 0013-5909
 PUBLISHER: METE
 DOCUMENT TYPE: Journal
 LANGUAGE: Hungarian
 AB The highest enrichment was achieved when yeast was exposed to trace elements in the stationary phase. Fe, Ti and Se were 91-99% incorporated this way. Enriched yeast is a trace element source for feed and food.
 CC 17-14 (Food and Feed Chemistry)
 IT 7439-89-6, Iron, biological studies 7439-96-5, Manganese, biological studies 7439-98-7, Molybdenum, biological studies 7440-32-6, Titanium, biological studies 7440-48-4, Cobalt, biological studies 7440-50-8, Copper, biological studies 7782-49-2, Selenium, biological studies
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (yeast enriched with trace elements as a trace element source in food and feed)

L1 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 1990:476787 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 113:76787
 ORIGINAL REFERENCE NO.: 113:12989a,12992a
 TITLE: Evaluation of bioavailability of iron in iron-enriched yeast. I. Prophylactic assay in rats

AUTHOR(S): Weng, Congying; Liu, Qiwei; Xu, Dadao
 CORPORATE SOURCE: Dep. Nutr. Food Hyg., Shanghai Med. Univ., Shanghai, Peop. Rep. China
 SOURCE: Yingyang Xuebao (1989), 11(4), 311-18
 CODEN: YYHPA4; ISSN: 0512-7955
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

AB A prophylactic assay was made to determine the bioavailability of Fe from Fe-enriched yeast fed to weanling Wistar rats. The Hb concentration was determined after 3 wk. A slope-ratio assay was used to calculate the relative biol. value (RBV) of the yeast Fe. The RBV of the yeast Fe was slightly higher than that of FeSO₄ (RBV ranged from 104.27% to 110.00%). The high bioavailability of the yeast Fe may be related to certain amino acids and vitamin B₂ contained in the yeast. Adding unfortified yeast to the diet was helpful for maintaining Hb concentration during the rapid growth period of rats, but there were no statistically significant differences. It is valid to use this nutritive yeast as a vehicle for Fe supplementation.

CC 17-6 (Food and Feed Chemistry)
 Section cross-reference(s): 18
 IT Yeast
 (iron bioavailability in iron-enriched)
 IT 7439-89-6, Iron, biological studies
 RL: BIOL (Biological study)
 (bioavailability of, in iron-enriched yeast)
)

L1 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1985:436515 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 103:36515
 ORIGINAL REFERENCE NO.: 103:5915a,5918a
 TITLE: Experimental study on the absorption of iron
 in iron-enriched nutrient
 yeast
 AUTHOR(S): Ma, Shumin; Wang, Baoqui; Hou, Yan; Zhang, Yajie; Yu,
 Liping
 CORPORATE SOURCE: Dep. Health, Bethune Med. Coll., Changchun, Peop. Rep.
 China
 SOURCE: Yingyang Xuebao (1985), 7(1), 25-8
 CODEN: YYHPA4; ISSN: 0512-7955
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 AB 59Fe-enriched yeast were given to rats by stomach tube. Rats of the
 control groups were given the radioactive 59Fe together with ordinary
 yeast plus FeSO4 or FeSO4 only. The absorption of Fe was calculated by the
 difference between intake and fecal loss. The absorption of Fe in
 59Fe-enriched yeast (38.7%) was similar to that of FeSO4 (38.3%). This
 indicates that the Fe incorporated into yeast is easily absorbed and can
 be used in Fe supplementation of foods.
 CC 18-1 (Animal Nutrition)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)

=> log h

(FILE 'HOME' ENTERED AT 20:34:41 ON 18 JAN 2011)

L1 FILE 'HCAPLUS' ENTERED AT 20:35:08 ON 18 JAN 2011
 24 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON IRON (3A) ENRICHED
 (3A) YEAST

FILE 'ZCAPLUS' ENTERED AT 20:35:43 ON 18 JAN 2011

FILE 'HCAPLUS' ENTERED AT 20:35:48 ON 18 JAN 2011
 D TI 1-24

FILE 'ZCAPLUS' ENTERED AT 20:35:49 ON 18 JAN 2011

FILE 'HCAPLUS' ENTERED AT 20:37:23 ON 18 JAN 2011
 D IBIB ABS HITIND 1-24

L3 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2010:286774 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 152:415191
 TITLE: Hypoglycemic health foods containing zinc-enriched
 yeast, selenium-enriched yeast or chromium-enriched
 yeast, Chinese medicinal extracts and vitamins
 INVENTOR(S): Yu, Xuefeng; Li, Zhihong; Yu, Minghua; Yao, Juan;
 Zhang, Yan; Zhang, Haibo; Xia, Changhong; Zhu, Yamin
 PATENT ASSIGNEE(S): Angel Yeast Co., Ltd., Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 12pp.
 CODEN: CNXKEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101658537	A	20100303	CN 2008-10210569	20080827
PRIORITY APPLN. INFO.:			CN 2008-10210569	20080827

L3 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2010:61710 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 153:357686
 TITLE: Establishment of model of iron deficiency and effects of iron-enriched yeast on growth and blood biochemical indices in weanling piglets
 AUTHOR(S): Xu, Zhenying; Chen, Daiwen; Yu, Bing
 CORPORATE SOURCE: Institute of Animal Nutrition, Sichuan Agricultural University, Ya'an, 625014, Peop. Rep. China
 SOURCE: Dongwu Yingyang Xuebao (2009), 21(6), 897-902
 CODEN: DYXOAK; ISSN: 1006-267X
 PUBLISHER: Zhongguo Xumu Shouyi Xuehui
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

L3 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2009:836368 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 151:335910
 TITLE: Effects of copper-enriched yeast on nutrient digestibility and serum physics-chemical parameters in simmental steer
 AUTHOR(S): Liu, Qiang; Wang, Cong; Dong, Kuanhu; Zhao, Xiang; Gao, Wenjun
 CORPORATE SOURCE: College of Animal Science and Technology, Shanxi Agricultural University, Taigu, Shanxi Province, 030801, Peop. Rep. China
 SOURCE: Jiguang Shengwu Xuebao (2008), 17(4), 502-508
 CODEN: JSXUFX; ISSN: 1007-7146
 PUBLISHER: Jiguang Shengwu Xuebao Bianjibuo
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

L3 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2008:1408788 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 150:562108
 TITLE: Research on screening of iron-enriched yeasts
 AUTHOR(S): Jiao, Shirong; Zuo, Cheng; Zeng, Jun; Wang, Ling
 CORPORATE SOURCE: College of Public Health, Sichuan University, Chengdu, Sichuan Province, 610041, Peop. Rep. China
 SOURCE: Zhongguo Niangzao (2007), (11), 53-56
 CODEN: ZHNIDA; ISSN: 0254-5071
 PUBLISHER: Beijing Zhongniang Zazhishe
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

L3 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2008:490194 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 148:494066
 TITLE: Development and characteristics of zinc-enriched bakers' yeast
 AUTHOR(S): Suzuki, Keizo; Kanzaki, Ken; Oka, Osamu; Matuo, Yuhsi
 CORPORATE SOURCE: Oriental Yeast Co. (OYC), Japan

SOURCE: Seibutsu Shiryō Bunseki (2008), 31(2), 139-146
 CODEN: SSBUEL; ISSN: 0913-3763
 PUBLISHER: Seibutsu Shiryō Bunseki Kagakkai
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: Japanese

L3 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2008:235168 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 148:329582
 TITLE: Method for manufacturing mineral-enriched yeast
 INVENTOR(S): Moon, Gi Hyeok; Yoon, Jeong Won
 PATENT ASSIGNEE(S): S. Korea
 SOURCE: Repub. Korea, 7pp.
 CODEN: KRXXFC
 DOCUMENT TYPE: Patent
 LANGUAGE: Korean
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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KR 797378	B1	20080122	KR 2006-95347	20060929
PRIORITY APPLN. INFO.:			KR 2006-95347	20060929

L3 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2007:1233850 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 148:354730
 TITLE: Protective effects of selenium-enriched yeasts on mice with liver damage caused by iron overloading
 AUTHOR(S): Zhu, Hang; He, Qiu-shi; Lu, Yang; Lei, Lei; Luo, Hai-ji
 CORPORATE SOURCE: Department of Nutrition and Food Hygiene, Public Hygiene and Tropical Medicine School, Southern Medical University, Guangzhou, 510515, Peop. Rep. China
 SOURCE: Redai Yixue Zazhi (2007), 7(8), 732-734
 CODEN: RYZEAI; ISSN: 1672-3619
 PUBLISHER: Guangdong Redai Yixue Zazhishe
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

L3 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2007:121292 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 146:315513
 TITLE: Iron enriched yeast biomass - A promising mineral feed supplement
 AUTHOR(S): Pas, Maja; Piskur, Barbara; Sustaric, Matevz; Raspor, Peter
 CORPORATE SOURCE: Food Science and Technology Department, Biotechnical Faculty, Chair of Biotechnology, University of Ljubljana, Ljubljana, 1111, Slovenia
 SOURCE: Bioresource Technology (2007), 98(8), 1622-1628
 CODEN: BIRTEB; ISSN: 0960-8524
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2005:1269802 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 144:330162
 TITLE: Application of calcium, iron and zinc enriched yeasts to bread
 AUTHOR(S): Shi, Changbo; Yan, Xishuang
 CORPORATE SOURCE: Harbin University of Commerce, Harbin, 150076, Peop. Rep. China
 SOURCE: Shipin Gongye Keji (2005), 26(2), 78-79
 CODEN: SGOKE6; ISSN: 1002-0306
 PUBLISHER: Shipin Gongye Keji Bianjibu
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

L3 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2005:285961 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 144:50099
 TITLE: Breeding of a high-biomass, iron-enriched yeast strain and its fermentation conditions
 AUTHOR(S): Yuan, Yulan; Guo, Xuenan; Zhang, Borun; Liu, Shigui
 CORPORATE SOURCE: College of Life Sciences, Sichuan University, Chengdu, 610064, Peop. Rep. China
 SOURCE: Gongye Weishengwu (2004), 34(4), 29-33
 CODEN: GOWEEK; ISSN: 1001-6678
 PUBLISHER: Quanguo Gongye Weishengwu Xinxin Zhongxin
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

L3 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2004:588000 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 141:122727
 TITLE: Recovery of green color of browned plants and algae using mineral-enriched yeasts
 INVENTOR(S): Tsuchida, Yoshiaki; Toyoguchi, Minoru
 PATENT ASSIGNEE(S): Nabebayashi K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004201553	A	20040722	JP 2002-373703	20021225
PRIORITY APPLN. INFO.:			JP 2002-373703	20021225

L3 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2004:110131 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 140:405515
 TITLE: Construction of a high-biomass, iron-enriched yeast strain and study on distribution of iron in the cells of *Saccharomyces cerevisiae*
 AUTHOR(S): Yuan, Yulan; Guo, Xuenan; He, Xiuping; Zhang, Borun; Liu, Shigui
 CORPORATE SOURCE: College of Life Science, Sichuan University, Chengdu, 610064, Peop. Rep. China

SOURCE: Biotechnology Letters (2004), 26(4), 311-315
 CODEN: BILED3; ISSN: 0141-5492
 PUBLISHER: Kluwer Academic Publishers
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)
 REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2003:9965 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 138:38548
 TITLE: Mineral-enriched yeast food preparation
 INVENTOR(S): Ueto, Takamitsu
 PATENT ASSIGNEE(S): Fancil Corporation, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003000198	A	20030107	JP 2001-185019	20010619
JP 3467028	B2	20031117		
JP 2003061618	A	20030304	JP 2002-234356	20010619
PRIORITY APPLN. INFO.:			JP 2001-185019	A3 20010619

L3 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2002:635835 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 138:204113
 TITLE: Development and application of dietary minerals. Heme
 iron and zinc-enriched baker's yeast
 AUTHOR(S): Fukami, Katsuya
 CORPORATE SOURCE: Japan Tobacco Inc., Japan
 SOURCE: Food Style 21 (2002), 6(8), 69-72
 CODEN: FSTYFF; ISSN: 1343-9502
 PUBLISHER: Shokuhin Kagaku Shinbunsha
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: Japanese

L3 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2000:136833 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 133:30080
 TITLE: Zinc and iron bioavailability using zinc/iron-enriched
 bakers' yeast
 AUTHOR(S): Tsujimura, Masaru; Higasa, Shizu; Shimada, Shoji
 CORPORATE SOURCE: Laboratory of Bio-Organic Chemistry, Kagawa Nutrition
 University, Japan
 SOURCE: Joshi Eiyo Daigaku Kiyo (1999), 30, 159-165
 CODEN: JEDKD7; ISSN: 0286-0511
 PUBLISHER: Kagawa Eiyo Gakuen
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese

L3 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2000:37661 HCAPLUS <<LOGINID::20110118>>

DOCUMENT NUMBER: 132:77861
 TITLE: Mineral-enriched soybean curd and its manufacture
 INVENTOR(S): Nakagawa, Katsue
 PATENT ASSIGNEE(S): Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000014351	A	20000118	JP 1998-202828	19980703
PRIORITY APPLN. INFO.:			JP 1998-202828	19980703

L3 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 1999:579658 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 131:204635
 TITLE: Composition for pharmaceutical use and/or for
 nutritional supplementation in humans or animals
 INVENTOR(S): Drewski, Andrea; Mauren, Leo; Siegmund, Martin; Wendt,
 Sylke
 PATENT ASSIGNEE(S): Dr. Schieffer Arzneimittel G.m.b.H., Germany
 SOURCE: Ger., 12 pp.
 CODEN: GWXXAW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19812753	C1	19990909	DE 1998-19812753	19980323
WO 9948506	A2	19990930	WO 1999-DE732	19990316
W: AU, BR, CA, CN, ID, JP, KR, MX, PL, SG, TR, US, VN, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9936995	A	19991018	AU 1999-36995	19990316
PRIORITY APPLN. INFO.:			DE 1998-19812753	A 19980323
			WO 1999-DE732	W 19990316
OS.CITING REF COUNT:	1	THERE ARE 1	CAPLUS RECORDS THAT CITE THIS RECORD	
REFERENCE COUNT:	4	THERE ARE 4	CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT	

L3 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 1998:113535 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 128:204209
 ORIGINAL REFERENCE NO.: 128:40387a,40390a
 TITLE: Yeast enriched with trace elements as a new type of
 trace element source
 AUTHOR(S): Hegoczki, Jozsef; Suhajda, Agnes; Janzso, Bela;
 Vereczkey, Gabor
 CORPORATE SOURCE: Hung.
 SOURCE: Eltelmezesi Ipar (1997), 51(11), 339-341
 CODEN: EMIFAB; ISSN: 0013-5909
 PUBLISHER: METE
 DOCUMENT TYPE: Journal

LANGUAGE: Hungarian

L3 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 1997:202598 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 126:237738
 ORIGINAL REFERENCE NO.: 126:45993a,45996a
 TITLE: Effects of selenium-enriched yeast on microelement content in rat tissues
 AUTHOR(S): Djubic, Ivana; Mandic, M.; Jozanov-Stankov, Olga; Demajo, M.; Vrvic, M. M.
 CORPORATE SOURCE: Center of Chemistry, Institute of Chemistry, Technology and Metallurgy, Belgrade, 11000, Yugoslavia
 SOURCE: Naucni Skupovi - Srpska Akademija Nauka i Umetnosti, Odeljenje Prirodno-Matematickih Nauka (1995), 6(Conference on Selenium, 1993), 105-113
 CODEN: NSSNFV
 PUBLISHER: Srpska Akademija Nauka i Umetnosti
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L3 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 1990:476787 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 113:76787
 ORIGINAL REFERENCE NO.: 113:12989a,12992a
 TITLE: Evaluation of bioavailability of iron in iron-enriched yeast. I. Prophylactic assay in rats
 AUTHOR(S): Weng, Congying; Liu, Qiwei; Xu, Dadao
 CORPORATE SOURCE: Dep. Nutr. Food Hyg., Shanghai Med. Univ., Shanghai, Peop. Rep. China
 SOURCE: Yingyang Xuebao (1989), 11(4), 311-18
 CODEN: YYHPA4; ISSN: 0512-7955
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

L3 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 1985:436515 HCAPLUS <<LOGINID::20110118>>
 DOCUMENT NUMBER: 103:36515
 ORIGINAL REFERENCE NO.: 103:5915a,5918a
 TITLE: Experimental study on the absorption of iron in iron-enriched nutrient yeast
 AUTHOR(S): Ma, Shumin; Wang, Baogui; Hou, Yan; Zhang, Yajie; Yu, Liping
 CORPORATE SOURCE: Dep. Health, Bethune Med. Coll., Changchun, Peop. Rep. China
 SOURCE: Yingyang Xuebao (1985), 7(1), 25-8
 CODEN: YYHPA4; ISSN: 0512-7955
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

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(FILE 'HOME' ENTERED AT 20:34:41 ON 18 JAN 2011)

FILE 'HCAPLUS' ENTERED AT 20:35:08 ON 18 JAN 2011
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 (3A) YEAST

 FILE 'ZCAPLUS' ENTERED AT 20:35:43 ON 18 JAN 2011

 FILE 'HCAPLUS' ENTERED AT 20:35:48 ON 18 JAN 2011
 D TI 1-24

 FILE 'ZCAPLUS' ENTERED AT 20:35:49 ON 18 JAN 2011

 FILE 'HCAPLUS' ENTERED AT 20:37:23 ON 18 JAN 2011
 D IBIB ABS HITIND 1-24

 FILE 'ZCAPLUS' ENTERED AT 20:37:26 ON 18 JAN 2011

 FILE 'HCAPLUS' ENTERED AT 20:54:06 ON 18 JAN 2011
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 L2 1 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON EVALUATION (5A)
 BIOAVAILABILITY (5A) IRON (5A) YEAST
 D IBIB
 D ABS
 L3 21 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON STUDY (5A) IRON (5A)
 ENRICHED (5A) YEAST

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 FILE 'HCAPLUS' ENTERED AT 20:56:59 ON 18 JAN 2011
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